

CARMELIET, Peter
Appl. No. 10/578,485
Attny. Ref.: 4465-10
Amendment
Monday, June 22, 2009

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows:

1. (Previously Presented) A transgenic *Xenopus* tadpole comprising a transgene that is a reporter gene specifically expressed in a functional lymphatic vessel system of said *Xenopus* tadpole and that visualizes said lymphatic vessel system, said lymphatic vessel system comprising lymphatic vessels, lymphatic sacs and a lymphatic heart.

Claim 2. (Canceled)

3. (Previously Presented) A method to produce a transgenic *Xenopus* tadpole according to claim 1 comprising introducing a vector comprising a transgene under control of a promoter specifically expressed in the lymphatic vascular system into cells of a *Xenopus* tadpole.

4. (Previously Presented) A method according to claim 3 wherein said promoter is selected from the list comprising a Podoplanin promoter, a Prox-1 promoter, a VEGFR-3 promoter and a LYVE-1 promoter.

5. (Previously Presented) A method for visualizing the lymphatic vessel system in a *Xenopus* tadpole comprising generating a transgenic *Xenopus* tadpole comprising a reporter gene that is specifically expressed in the lymphatic vessel system.

6. (Previously Presented) A method to identify a compound capable of modulating lymphatic vessel development in a transgenic *Xenopus* tadpole according to claim 1 comprising the steps:

a) contacting said transgenic *Xenopus* tadpole with a test compound,

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b) comparing the lymphatic vessel system in said transgenic *Xenopus* tadpole contacted with said test compound with the lymphatic vessel system of a transgenic *Xenopus* tadpole that was not contacted with said test compound and,

c) determining the effect of said test compound on lymphatic vessel development, such that if lymphatic vessel development in the transgenic *Xenopus* contacted with said test compound is different from the lymphatic vessel development in the transgenic *Xenopus* tadpole that was not contacted with said test compound, said compound is a modulator of the lymphatic vessel system.

7. (new) The method according to claim 3, wherein said promoter is a promoter derived from *Xenopus*.